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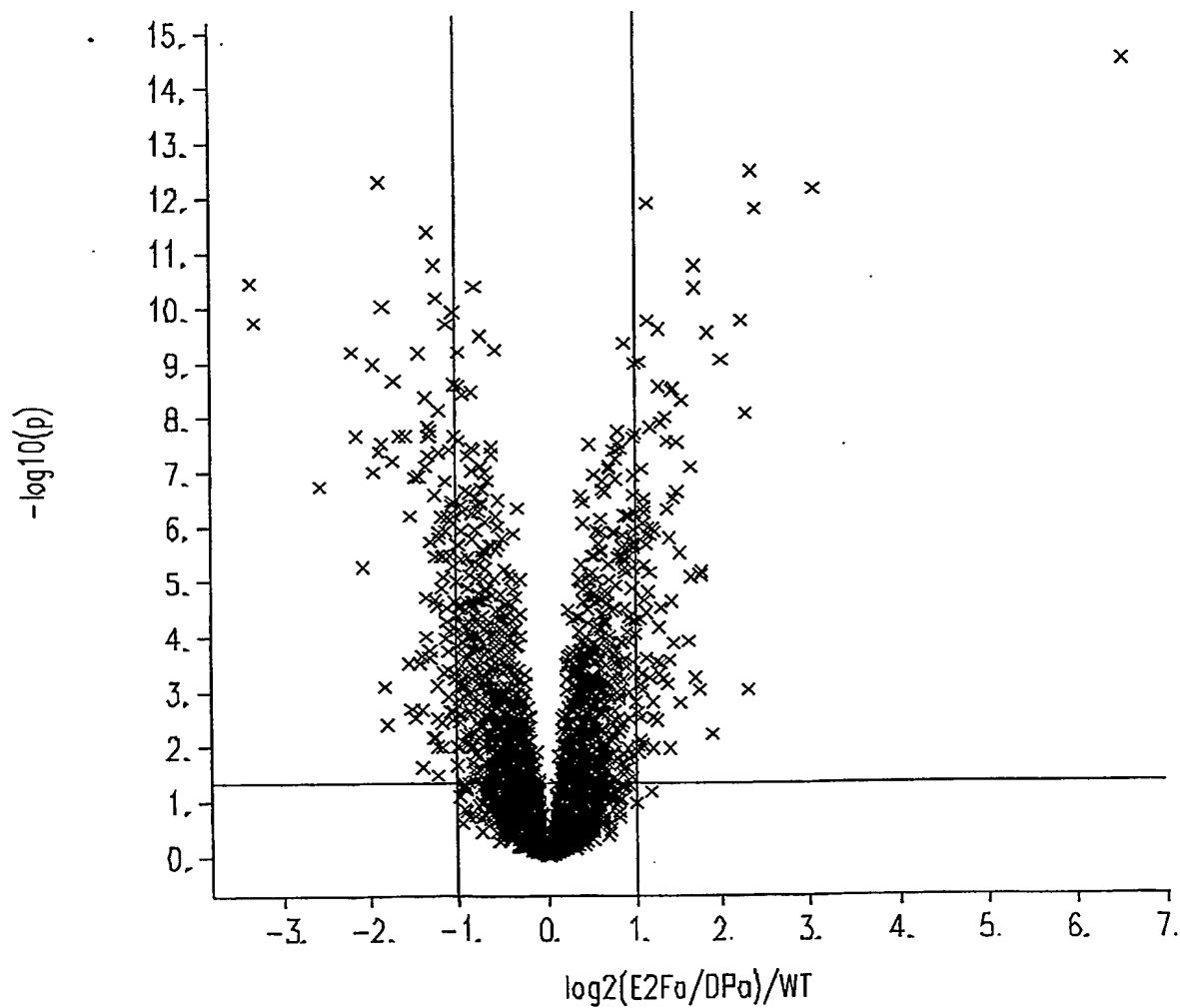


FIGURE 1

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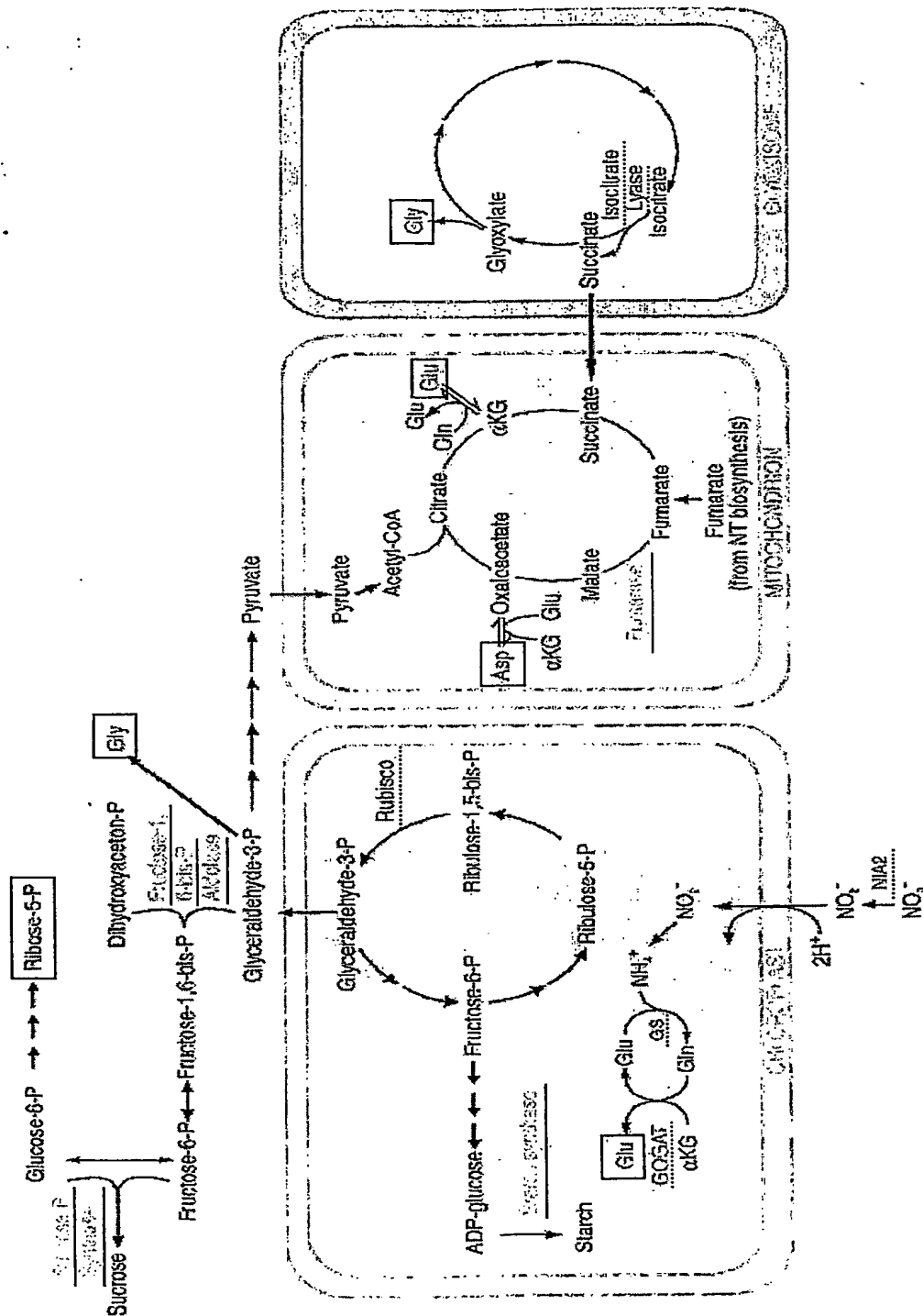
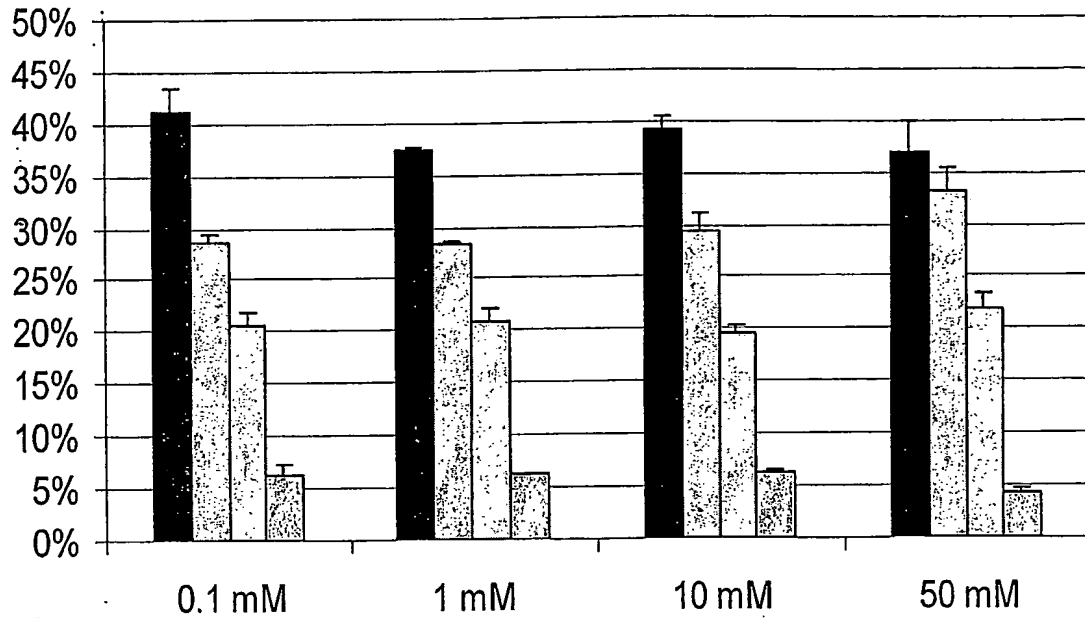
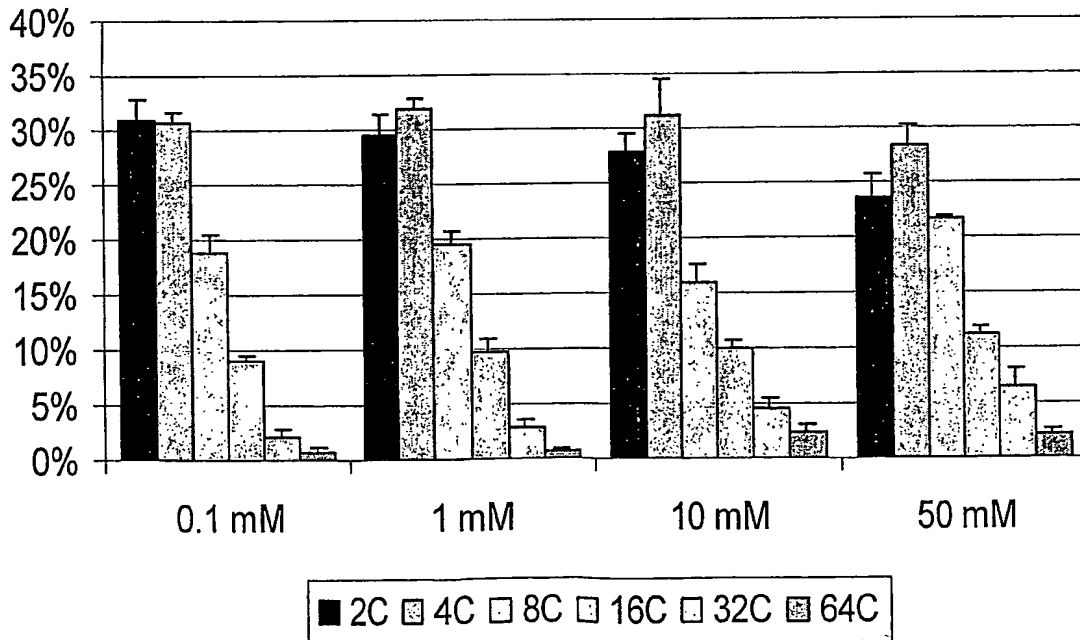


FIGURE 2

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A**B****FIGURE 3**

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MATDB - entry At1g57680 from contig t8l23

http://mips.gsf.de/cgi-bin/proj/thal/gv_report?18l23+At1g57680**MATDB - entry At1g57680 from contig t8l23**

mips

(Chromosome 1 / BAC clone T8L23 / sequence database accession [EMBL:AC079739](#))

Type: gene/protein
Code: At1g57680
Old code: T8L23_15
Title: putative protein
Contig: t8l23
Position: 53392-54480 (C)

Notes**Classification**

- known protein

Functional Category

- UNCLASSIFIED PROTEINS

TargetP prediction

- Targeted to secretory pathway
- TargetP score: 0.968
- TargetP reliability class: 2
- Probable signal sequence length: -

TMHMM transmembrane prediction

- Very likely to be a transmembrane protein (or have a signal peptide) (Exp number of AA in TMHs: 110)
- A transmembrane region could actually be a signal peptide (Exp number, first 60 AAs: 21)
- Orientation of N-terminal: external side (probability: 0.9)
- Transmembrane regions:
 - 40-62
 - 83-100
 - 138-160
 - 181-203
 - 213-235

EMBL

- [AY072149](#)

mRNA matches: 1 found**Arabidopsis ESTs**

- found 10
[AA585779](#); [AI992654](#); [AI998042](#); [AV518701](#); [AV538415](#); [AV538372](#);
[AV541088](#); [AV550688](#); [AV550640](#); [AV554579](#);

FIGURE 4

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MATDB - entry At1g57680 from contig t8l23

http://mips.gsf.de/cgi-bin/proj/thal/gv_report?t8l23+At1g57680**Full report**

- Full report includes FST matches and external annotation... slow.

Protein properties

PEDANT and Interpro data are being recalculated. To access old PEDANT data, use the link in the left frame, but be aware that some protein sequences have been changed due to update of gene models based on cDNA data and PEDANT data may be outdated.

[Click here](#) to submit new information about this entry

FIGURE 4 (contin.)

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A. thaliana - contig t8123 - entry At1g57680

http://mips.gsf.de/cgi-bin/proj/thal/get_pep?t8123/At1g57680*A. thaliana* - contig t8123 - entry At1g57680

mips

>P1;At1g57680
putative protein
MPLTKLVDA FGVVTCILVA LLVLLGLLCI AYSFYFQSHV RKQGYIQLGY FSGPWIIIRIT
FILFAIWWAV GEIFRLSLLR RHRRLSGLD LRWQENVCKW YIVSNLGFPE PCLFLTMFL
LRAPLKMESG ALSGKWNRTD AGYIILYCLP MLALQLAVVL SESRLNGGSG SYVKLPDFT
RTYSRVIIDH DEVALCTYPL LSTILLGVFA AVLTAYLFWL GRQILKLVIN KRLQKRVYTL
IFSVSSFLPL RIVMLCLSVL TAADKIIFEA LSFLAFLSLF CFCVVSICLL VYFPVSDSMA
LRGLRDTTDE DTAVTEERSG ALLLAPNSSQ TDEGLSLRGR RDSGSSTQER YVELSLFLEA
EN*
C; Length 362 aa
C; Sequence At1g57680 was extracted from t8123
C; Fragment (54480-53392(C))

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A. thaliana - contig t8l23 - coordinates: 53392-54480 (C)

http://mips.gsf.de/cgi-bin/proj/thal/get_dna.pl?l8l23/C/53392-54480

A. thaliana - contig t8l23 - coordinates: 53392-54480 (C)

mlps

```
1 ATGCCCCGA CAAAATTAGT TCCCGATGCA TTCGGCGTGG TGACGATATG TCTAGTCGCT
61 CTGCTAGTTC TTTTGGGTCT CCTTTGCATC GCTTACTCGT TCTATTTCCA GTCTCACGTT
121 CGTAAGCAAG GCTATATTCA ACTTGGTTAC TTCAGTGGTC CCTGGATTAT CCGAATCACT
181 TTCATTCTCT TTGCTATCTG GTGGGCTGTT GGTGAGATT TCGATTGAG TTGTTGAGG
241 CGTCACAGAA GGTGTGTGAG TGGGTTGGAT CTGAGATGGC AAGAAAACGT TTGCAAGTGG
301 TACATCGTTT CCAATCTAGG ATTTGCCGAG CCTTGTCCTT TTCTGACTCT CATGTTTCTT
361 CTGCGTGTCT CCTTGAAGAT GGAATCAGGG GCTTTGAGCG GAAAATGGAA CAGGGACACA
421 GCAGGTTATA TTATTCTTTA TTGTCTCCCG ATGCTTGCTC TTCAACTTGC GGTGTGTGTG
481 TCCGAGTCAC GCCTAAATGG TGGTAGTGGC TCTTATGTAA AGCTGCCACA CGACTTCACA
541 AGAAGCTATT CCGAGTTAT TATTGATCAC GACGAGGTGG CCTTATGCAC ATATCCTCTA
601 CTGAGTACCA TCCTTCTTGG TGTGTTTGCA GCCGTCTTAA CAGCTTACTT GTTCTGGCTT
661 GGAAGGCAGA TACTGAAACT TGTCAATTAAC AAGCGTTTAC AGAAGAGAGT ATACACTTTG
721 ATATTCTCGG TCTCGAGTTT CCTTCCATTA AGGATTGTTA TGCTCTGTTT GTCGGTCTCT
781 ACAGCAGCAG ACAAGATTAT ATTCGAAGCC CTTCCTTCTT TGGCCTTCCT CTCCTCTCTC
841 TGCTTTTGGG TGGTATCCAT CTGCTTGCTT GTCTACTTCC CGGTTTCAGA TTCCATGGCC
901 CTGAGAGGTC TAAGAGACAC AGATGATGAG GATACGGCTG TGACCGAAGA ACGCAGTGGT
961 GCTCTGTAC TTGCACCAA CTCTTCACAA ACTGATGAGG GATTGAGCTT AAGAGTCCGG
1021 AGAGACTCGG GATCGTCTAC ACAGGAGAGG TATGTGGAAC TCAGCCTATT TCTGGAAGCT
1081 GAGAACTAA
```

FIGURE 4 (contin.)

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A. thaliana - contig t8l23 - coordinates: 53392-54480 (C)

http://mlps.gsf.de/cgi-bin/proj/th..._gendna.pl?l8l23/C/53392-54480/500

A. thaliana - contig t8l23 - coordinates: 53392-54480 (C)

mlps

```

1  gtattatctc ttgagattct gtgttttaag gttatgactt ggctttatgt atttcaatat
61  tgttattgat ttgtgtgtta alcatcctaa tcttcaaggt tgctttatgt ttgagaaagg
121  ttatgacttt ttaegatcta ygggttaagat ggtttgatag gtctttgttt caaatttttg
181  gtatatatttg taagtttttg attatttgtt gttttgttta gtttatgtag gtaacacgca
241  tatcaagtgt taaagagtca agatcacaaa aagttctatc ggggtgatctg ggctgctttc
301  ttttqtaate taattgcaga aactttgctc tgacttggat agcttctgaa aaggttcaat
361  ctttctccgt ttttcatcaa tgagtagtaa ataactctga aatttgttgg yagayaaagg
421  gcacattgca ctgctattgc tagagaacgt ttctgcaccc atgctggtag agagcatgcg
481  tggatactgt gttttgggtg ATGCCCTGA CAAATTAGT TCCGATGCA TTCGGCGTGTG
541  TGACGATATG TCTAGTCGCT CTGCTAGTTC TTTTGGTCT CCTTTCATC GCTTACTCGT
601  TCTATTTCCA GTCTCAGCT CGTAAGCAAG GCTATATCA ACTTGGTTAC TTCAGTGGTC
661  CCTGGATTAT CCGAATCACT TTCAATCTCT TTGCTATCTG GTGGGCTGTT GGTGAGATT
721  TTCGATTGAG TTGTGTGAG CGTCACAGAA GGTGTGTGAG TGGGTGGAT CTGAGATGSC
781  AAGAAAAACGT TTGCAAGTGG TACATCGTTT CCAATCTAGG ATTTCGGAG CCTTGTCTCT
841  TTCTGACTCT CATGTTTCTT CTGCGTGCTC CCTTGAAGAT GGAATCAGGG GCTTGTAGCG
901  GAAAAAGGAA CAGGGACACA GCAGGTATA TTATCTTTA TTGTCTCCCG ATGCTTGCTC
961  TTCAACTTGC GGTGTGTGTG TCCGAGTCAC GCCTAAATGG TGGTAGTGGC TCTTATGTAA
1021  AGCTGCCACA CGACTICACA AGAACGTATT CCCAGTTAT TATTGATCAC GACGAGGTGG
1081  CCTTATGCACT ATATCTCTTA CTGAGTACCA TCCTTCTTGG TGTGTGTGCA GCCGTCTTAA
1141  CAGCTTACTT GTTCTGGCTT GGAAGGCAGA TACTGAACT TGTCAATAC AAGCGTTTAC
1201  AGAAGAGAGT ATACACTTIG ATATTTCTCG TCTCGAGTTT CCTTCCATTA AGGATTGTTA
1261  TGCTCTGTTT GTCGGTCTC ACAGCAGCAG ACAAGATTAT ATTGGAAGCC CTTTCTTTCT
1321  TGGCCCTTCT CTCCCTCTTC TGCTTTTGGG TGGTATCCAT CTGCTTGCTT GTCTACTTCC
1381  CGGTTTCAGA TTCCATGGCC CTGAGAGGTC TAAGAGACAC AGATGATGAG GATACGGCTG
1441  TGACCGAAGA ACGCAGTGGT GCTCTGTTC TCGACCAA CTCTTCACTA ACTGATGAGG
1501  GATTGAGCTT AAGAGGTCGG AGAGACTCGG GATCGTCTAC ACAGGAGAGG TATGTGGAAC
1561  TCAGCCTATT TCTGGAAGCT GAGAACTAA a stgcgcaag gctgtttcta ttgggctttt
1621  ggcaatytae agattcctgg tgaacaagc agagagagag ggataaagag tttaagtatg
1681  agaatatgtt tgcgcaaaaa aagycataat ttcagttttg tggcaagac actttgactg
1741  taaaggaggg rttfaagggg tttactcttg tgaggggttg ttgtttgaaa tgtttctg
1801  ttgatggatc atatttttgt acctttatta tgtgatcaat ttgtatttag aaaaaaaaaa
1861  aaaaaacbat agccgtgaac atyagcatga ctttaaaaga taaatcagcc ttttaacctc
1921  tattcttttg actcatgaac atyagacttc ataagaaat tagagaaat gtaccaagca
1981  aaacagccat atagtgttct aaacttccat gtcaattoga octayacaaa tacacttatg
2041  acctcagaaa atttgacata attttaatat ttaaccaagt ttgtcaaga

```

Sequences of 5' leader, 3' trailer, and introns (when applicable) are printed in lowercase.

FIGURE 4 (contin.)

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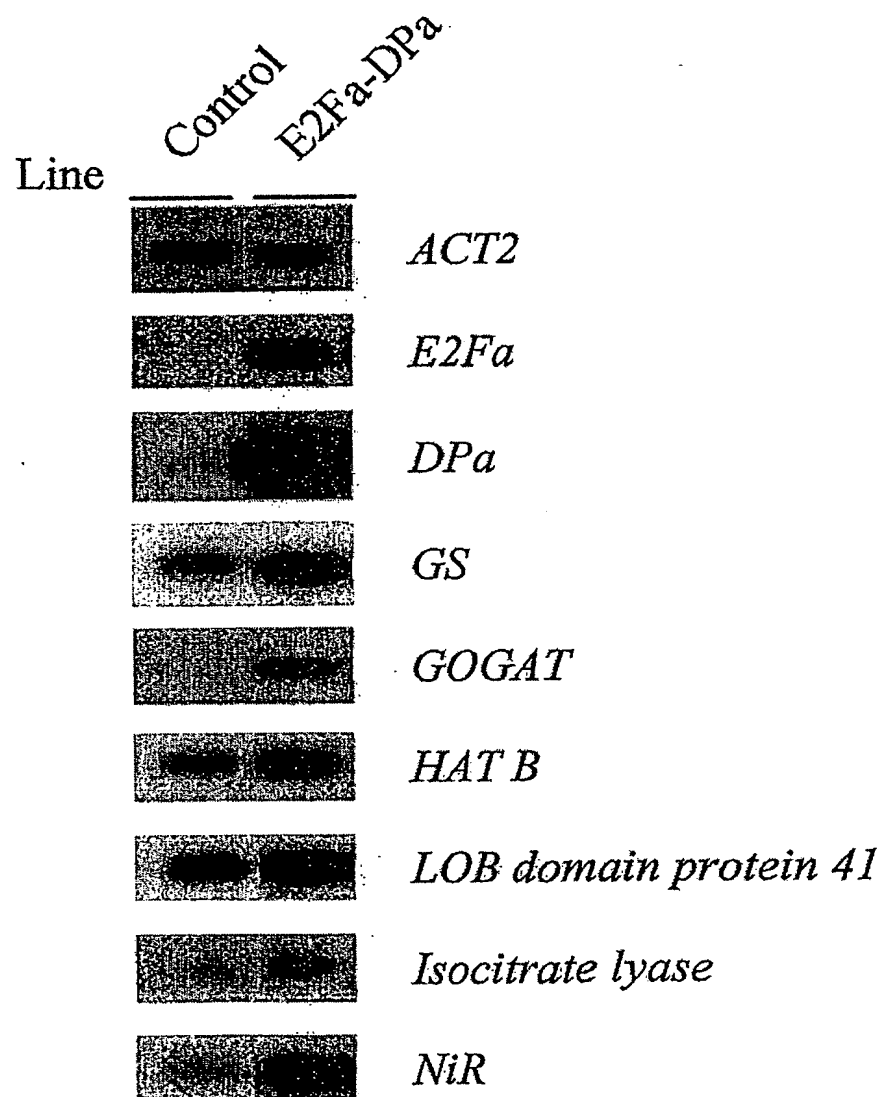


FIGURE 5

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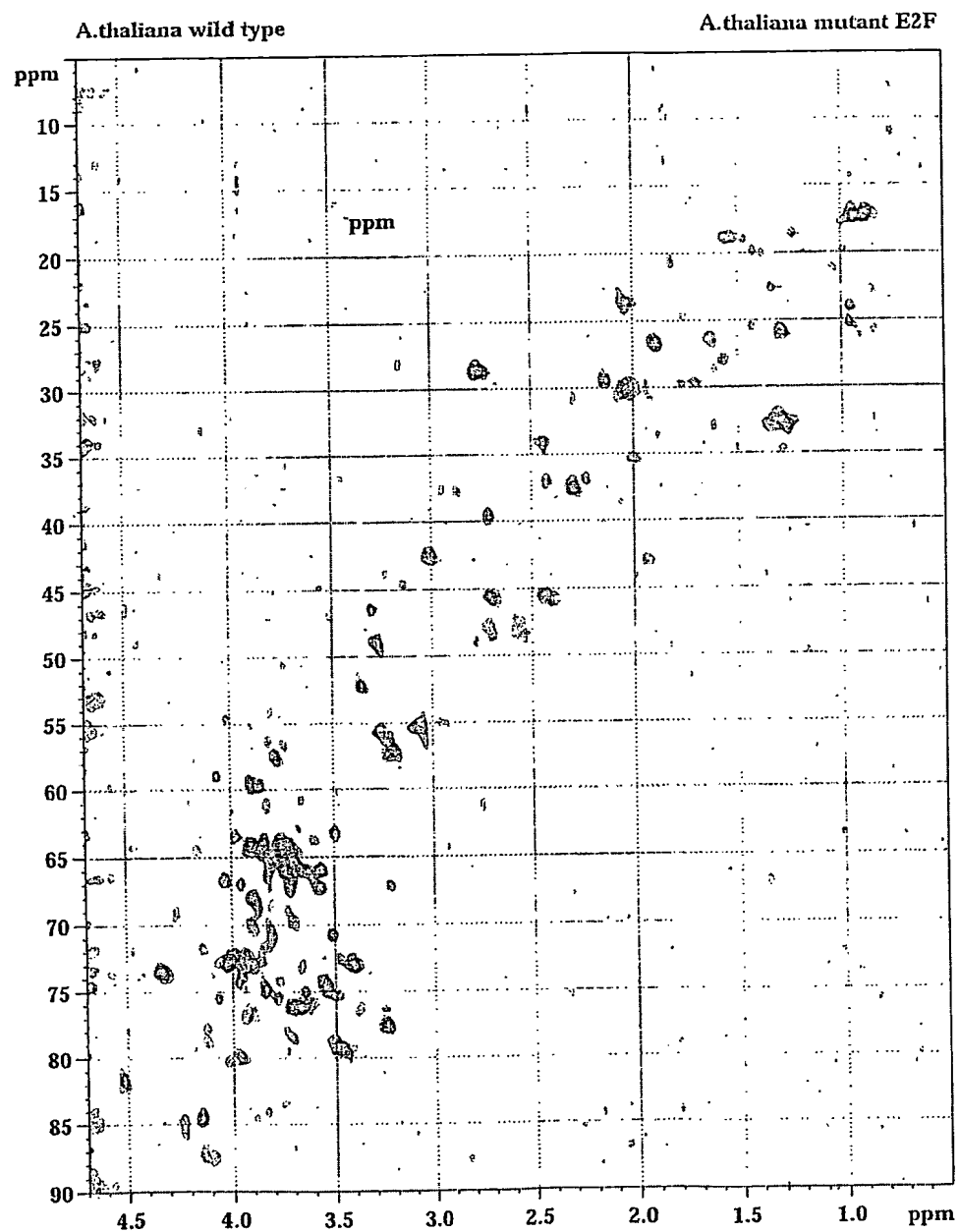


FIGURE 6

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